

**From:** DeMaria, Eva  
**To:** "PUGH Mark"  
**Subject:** FW: GeoDesign draft Work Plan, Bank Stability Analysis: Sulzer Pumps Facility - DEQ ECSI No. 1235  
**Date:** Thursday, April 14, 2016 2:02:00 PM  
**Attachments:** [ODOT Hydraulics CHAPTER 15 bank protection.pdf](#)

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Hi Mark-

Our contractor noted that such work is very specific but would generally be guided by the resources below and attached.

[https://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/pages/hyd\\_manual\\_info.aspx](https://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/pages/hyd_manual_info.aspx)  
[https://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/pages/geotechnical\\_design\\_manual.aspx](https://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/pages/geotechnical_design_manual.aspx)

Hope that helps.

Eva

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**From:** PUGH Mark [<mailto:PUGH.Mark@deq.state.or.us>]  
**Sent:** Tuesday, April 12, 2016 1:05 PM  
**To:** DeMaria, Eva <[DeMaria.Eva@epa.gov](mailto:DeMaria.Eva@epa.gov)>  
**Subject:** RE: GeoDesign draft Work Plan, Bank Stability Analysis: Sulzer Pumps Facility - DEQ ECSI No. 1235

Eva,

I wasn't planning on having EPA conduct a formal review. However, if you have a methodology for evaluating bank stability that is preferred, or an example of a plan, I would be interested in that.  
Thank you.

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**From:** DeMaria, Eva [<mailto:DeMaria.Eva@epa.gov>]  
**Sent:** Tuesday, April 12, 2016 12:49 PM  
**To:** PUGH Mark  
**Subject:** FW: GeoDesign draft Work Plan, Bank Stability Analysis: Sulzer Pumps Facility - DEQ ECSI No. 1235

Mark-

Did you want us to review? Thanks.

Eva

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**From:** Kristen Tebbe [<mailto:ktebbe@geodesigninc.com>]  
**Sent:** Friday, April 08, 2016 2:16 PM  
**To:** [pugh.mark@deq.state.or.us](mailto:pugh.mark@deq.state.or.us)  
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**Subject:** GeoDesign draft Work Plan, Bank Stability Analysis: Sulzer Pumps Facility - DEQ ECSI No. 1235

On behalf of Steve Nelson, attached is our draft Work Plan for the bank stability assessment. Please review and provide comments to Steve.

**Note:** The PDF file is password protected. You do not need the password to open or print the file or copy text from the file. The password will need to be removed if you need to extract pages from the file or insert the file into another PDF. If you need the password or need me to remove the password and re-send, please let me know.

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